



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,036	09/03/2003	Masahiko Fukuda	SIC-03-032	2035

29863 7590 03/19/2007  
DELAND LAW OFFICE  
P.O. BOX 69  
KLAMATH RIVER, CA 96050-0069

EXAMINER
----------

CHARLES, MARCUS

ART UNIT	PAPER NUMBER
----------	--------------

3682

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/19/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/605,036	<b>Applicant(s)</b> FUKUDA, MASAHIKO	
	<b>Examiner</b> Marcus Charles	<b>Art Unit</b> 3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 8, 13 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-12 and 15-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 September 2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### **DETAILED ACTION**

This action is responsive to the amendment filed 12/27/2006, which has been entered.

Claims 1-25 are currently pending.

#### ***Drawings***

1. The examiner has accepted the drawing filed with this application.

#### ***Specification***

2. The disclosure is objected to because of the following informalities: in paragraph [0019], line 4, the reference numeral "20" should be --4--. Note, reference 4 depicts the drive mechanism and reference 20 depicts the opening.

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 9-12 and 15-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP (1010613) in view of Kerdjoudj et al. (D451, 072). EP (1010613) discloses the claimed invention including the derailleur comprising a motor housing (56) which constitutes a base member having two base housing portions (56a, 56b), a drive motor including a motor housing (262) enclosed in the spacing between the housing portions (56a, 56b). EP (1010613) fails to disclose a misalignment structure inhibiting structure between the first and second base housing portions to inhibit the misalignment

Art Unit: 3682

of the housing by inhibiting the misalignment of the first and second housing portion, wherein the misalignment structure comprises an interlocking structure. Kerdjoudj et al. disclose a housing having a misalignment mechanism comprising an interlock mechanism (not labeled, see previous attached drawing). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the housing bases of EP (1010613) so that the alignment mechanism include interlocking features in view of Kerdjoudj et al. to make the connection easier and to ease the complexity of assembly. In addition, it is apparent the misalignment structure will inherently inhibit the misalignment of the motor housing because the misalignment structure will prevent lateral movement of the housing portions during assembling thus preventing inadvertent movement of the motor housing.

In claim 2, note the derailleur is a four link mechanism.

In claim 3, note each links has a pivot such that two links portions having a pivot coupled to the drive mechanism and the other two to a chain guide.

In claims 4-7,9, 19-12, Kerdjoudj et al disclose the claimed invention.

In claim 22, note EP (1010613) discloses each of the first and second base members are structured to accommodate a screw (64, 66) extending therethrough.

In claims 15-21 and 23-24 Kerdjoudj et al. the claimed invention.

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over EP (1010613) in view of Billman et al. (6,028,384). EP (1010613) discloses the claimed invention including the derailleur comprising a motor housing (56) which constitutes a base member having two base housing portions (56a, 56b), a motor with a housing

enclosed in the spacing between the housing portions. EP (1010613) fails to disclose a misalignment structure inhibiting structure between the first and second base housing portions such that the misalignment comprises an interlocking structure. Billman et al. a housing structure (10) comprising a first base member (38) and a second base member (42), a motor housing (see 16) disposed between the first and second housing portions (10 and 14), wherein each of the base members comprises a misalignment interlocking structure (see attached drawing in prior action). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of EP (1010613) to include the structure of Billman et al. in order to facilitate proper alignment during assembling. In addition, it is apparent the misalignment structure will inherently inhibit the misalignment of the motor housing because the misalignment structure will prevent lateral movement of the housing portions during assembling thus preventing inadvertent movement of the motor housing.

6. Claims 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP (1010613) in view of Kerdjoudj et al. (D451, 072). EP (1010613) as applied to claim 1 above, and further in view of Kerdjoudj et al. (6,054,785). EP (1010613) in combination with Kerdjoudj et al. (D451, 072) does not disclose each or the first and second includes a recess for receiving the first and second ends of a tubular interlock member. Kerdjoudj et al. ('785) discloses a first base (16) having a recess (see attached drawing) and a second base (14) having a recess such that each of the first and second recess receives a first and second end of an interlocking member (34). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to

further modify the device of EP (1010613) to include the limitation of Kerdjoudj et al. ('785) in order to prevent inadvertent movement between the bases and enhance proper alignment.

***Response to Arguments***

7. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus Charles whose telephone number is (571) 272-

Art Unit: 3682

7101. The examiner can normally be reached on Monday-Thursday 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ridley Richard can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Marcus Charles  
Primary Examiner  
Art Unit 3682  
March 16, 2007